## **Catalog management API0**

Catalog management API manages the following Data resources:

- Attachment which describes a product through video, pictures... with the following attributes
  - Description: Description of the attachment
  - Href: Reference of the attachment
  - Id: Unique identifier of the attachment
  - TypeAttachment type such as video, picture
  - Uri:Uniform Resource Identifier, describes the mechanism used to access the resource, the specific computer that the resource is housed in, the specific name of the resource (file name) on the computer
  - ° url: Uniform Resource Locator, is a web page address (a subset of URI)
- Bundled Product Offering: A type of Product Offering that belongs to a grouping of Product Offerings made available to the market. It inherits of all attributes of Product Offering.
- Bundled Product Specification: A type of Product Specification that belongs to a grouping of Product Specifications made available to the market. It inherits of all attributes of Product Specification.
- Catalog: A Product Catalog is a collection of Product Offerings, intended for a specific Distribution Channel, enhanced with additional information such as SLA parameters, invoicing and shipping details. Catalog attributes are:
  - Category: The category resource is used to group product offerings, service and resource candidates in logical containers. Categories can contain other categories and/or product offerings, resource or service candidates and have the following attributes:
    - Description: Description of the category
      - Href: Reference of the catalog
      - Id: Unique identifier of the category
      - Is Root: If true, this Boolean indicates that the category is a root of categories
      - Last Update: Date and time of the last update
      - Lifecycle Status: Used to indicate the current lifecycle status
      - Name: Name of the category
      - Parent Id: Unique identifier of the parent category
      - Valid For: The period for which the category is valid
    - Version: Category version
  - Href: Reference of the catalog
  - Id: Unique identifier of the catalog
  - Last Update: Date and time of the last update
  - · Lifecycle Status: Used to indicate the current lifecycle status
  - Name: Name of the catalog
  - Type: Indicates if the catalog is a product, service or resource catalog
  - Valid For: The period for which the catalog is valid
  - Version: Catalog version
- · Channel: Defines the channel for selling product offerings with the following attributes
  - Href: Reference of the channel
  - Id: Unique identifier of the channel
  - Name: Name of the channel
- Place: Defines the places where the product offerings are sold with the following attributes:
  - Href: Reference of the channel
  - Id: Unique identifier of the channel
  - Name: Name of the channel
- Price: Provides all amounts (tax included, duty free, tax rate), used currency and percentage to apply for Prod Offer Price Alteration with the following attributes:
  - Currency Code: A string used as a code for specifying the currency associated to the given amounts. The ISO4217 norm uses 3 letters to define the currency (for example USD for US dollar or EUR for Euro)
  - Duty Free Amount: All taxes excluded amount (expressed in the given currency)
  - Percentage: Percentage to apply for Prod Offer Price Alteration
  - Tax Included Amount: All taxes included amount (expressed in the given currency)
  - Price Type: Indicates the price type: recurring, one time, usage
- Product Offering: The Product Offering resource represents entities that are orderable from the provider of the catalog, this resource includes pricing information.
  - Description: Description of the product Offering
  - Href: Reference of the Product Offering
  - · Id: Unique identifier of the product Offering
  - Is Bundle: is Bundle determines whether a product Offering represents a single product offering (false), or a bundle of product Offerings (true).
  - Last Update: Date and time of the last update
  - · Lifecycle Status: Used to indicate the current lifecycle status
  - Name: Name of the product Offering
  - validFor: The period for which the product Offering is valid
  - version: Product Offering version
- **Product Offering Price**: is based on both the basic cost to develop and produce products and the enterprise's policy on revenue targets. This price may be further revised through discounting (prod Offer Price Alteration):
  - Description: Description of the product Offering Price
  - ° Href: Reference of the Product Offering Price
  - Id: Unique identifier of the product Offering Price
  - Name: Name of the product Offering Price
  - Price Type: Indicates the price type: recurring, one time, usage
  - Recurring Charge Period: Could be month, week...
  - Unit of Measure: Could be minutes, GB...
  - ° Valid For: The period for which the product Offering Price is valid
  - Version: Product Offering Price version
- · Prod Offer Price Alteration: is an amount, usually of money, that modifies a price charged for a product Offering.

- Application Duration: Duration during which the prod Offer Price Alteration applies on the product Offering
- Description: Description of the prod Offer Price Alteration
- Href: Reference of the prod Offer Price Alteration
- $^{\circ}~$  Id: Unique identifier of the prod Offer Price Alteration
- Name: Name of the prod Offer Price Alteration
- $^{\circ}~$  Price Condition: Condition that triggers the price application
- Price Type: Indicates the price type: recurring, one time, usage
- Recurring Charge Period: Could be month, week...
- Unit of Measure: Could be minutes, GB...
- Valid For: The period for which the prod Offer Price Alteration is valid
- Product Offering Term is a condition under which a Product Offering is made available to Customers. For instance, a product Offering can be offered with multiple commitment periods.
  - Description: Description of the product Offering Term
  - Duration: Duration of the product Offering Term
  - Name: Name of the product Offering Term
  - Valid For: The period for which the product Offering term is valid
- Product Spec Characteristic is a characteristic quality or distinctive feature of a Product Specification. The characteristic can be taken on a discrete value, such as color, can take on a range of values or can be derived from a formula:
  - Configurable: If true, the Boolean indicates that the product Spec Characteristic is configurable
  - ° Description: A narrative that explains in detail what the product Spec Characteristic is
  - Href: Reference of the product Spec Characteristic
  - ° Id: Unique identifier of the product Spec Characteristic
  - Name: Name of the product Spec Characteristic
  - Value Type: A kind of value that the characteristic can take on, such as numeric, text and so forth
  - Valid For: The period for which the product Spec Characteristic is valid
- Product Spec Char Relationship: An aggregation, migration, substitution, dependency or exclusivity relationship between/among product Spec Characteristics.
  - ° Href: Reference of the product Specification
  - Valid For: The period for which the product Spec Char Relationship is valid
  - Type: Type of relationship such as aggregation, migration, substitution, dependency, exclusivity
  - Product Spec Characteristic Value: A number or text that can be assigned to a Product Spec Characteristic.
    - Default: Indicates if the value is the default value for a characteristic
      - Unit Of Measure: Could be minutes, GB...
      - <sup>o</sup> Valid For: The period of time for which a value is applicable
      - ° Value: A discrete value that the characteristic can take on
      - ° Value From: The low range value that a characteristic can take on
      - Value To: The upper range value that a characteristic can take on
    - Value Type: A kind of value that the characteristic can take on, such as numeric, text, and so forth
- Product Specification: A detailed description of a tangible or intangible object made available externally in the form of a Product Offering to customers or other parties playing a party role.
  - Brand: The manufacturer or trademark of the specification
  - ° Description: A narrative that explains in detail what the product specification is
  - Href: Reference of the product specification
  - ° Id: Unique identifier of the product specification
  - Is Bundle: is Bundle determines whether a product Specification represents a single product Specification (false), or a bundle of product Specification (true).
  - ° Last Update: Date and time of the last update
  - ° Lifecycle Status: Used to indicate the current lifecycle status
  - Name: Name of the product specification
  - ° Product Number: An identification number assigned to uniquely identify the specification
  - Valid For: The period for which the product specification is valid
  - Version Product: specification version
- Product Specification Relationship is a migration, substitution, dependency or exclusivity relationship between/among product specifications.
  - Href: Reference of the product Specification
    - ° Valid For: The period for which the product Specification Relationship is valid
    - ° Type: Type of relationship such as migration, substitution, dependency, exclusivity
- Related Party Defines party or party Role linked to a specific entity.
  - Href: Reference of the related Party, could be a party reference or a party Role reference
    - $^{\circ}\;$  Name: Name of the related party
    - $^{\circ}~$  Role: Role of the related party
  - Valid For: The period for which the related party is linked to the entity
- Required Resource Specification is the Resource Specification required to realize a resource Specification.
  - Href: Reference of the resource Specification
  - Name:Name of the required Resource Specification
  - Valid For: The period for which the Required Resource Specification is valid
- Required Service Specification is the Service Specification required to realize a Service Specification.
  - Href: Reference of the service Specification
  - Name: Name of the required Service Specification
  - Valid For: The period for which the Required Service Specification is valid
  - **Resource Candidate** is an entity that makes a Resource Specification available to a catalog. A Resource Candidate and its associated Resource Specification may be published made visible in any number of Resource Catalogs, or in none.
    - Description: a narrative that explains in detail what the resource candidate is
    - Href: Reference of the resource candidate
    - ° Id: Unique identifier of the resource candidate
    - ° Last Update: Date and time of the last update
    - ° Lifecycle Status: Used to indicate the current lifecycle status
    - Name: Name of the resource candidate
    - ° Valid For: The period for which the resource candidate is valid
    - Version: Resource candidate version

- Resource Spec Characteristic defines the characteristic features of a Resource Specification. Every Resource Specification has a variety of important attributes, methods, constraints, and relationships, which distinguish that Resource Specification from other Resource Specifications.
  - Configurable: If true, the Boolean indicates that the resource Spec Characteristic is configurable
  - Description: a narrative that explains in detail what the resource Spec Characteristic is
    Href: Reference of the resource Spec Characteristic
  - Hrer: Reference of the resource Spec Characteristic
    Id: Unique identifier of the resource Spec Characteristic
  - Name: Name of the resource Spec Characteristic
  - Value Type: A kind of value that the characteristic can take on, such as numeric, text and so forth
  - Valid For: The period for which the resource Spec Characteristic is valid

• Resource Spec Characteristic Value defines the characteristic features of a Resource. Every Resource has a variety of important attributes and relationships, which distinguish that Resource from other Resources.

- Default: Indicates if the value is the default value for a characteristic
- Unit Of Measure: Could be minutes, GB...
- $^{\circ}$   $\,$  Valid For: The period of time for which a value is applicable
- ° Value: A discrete value that the characteristic can take on
- $^{\circ}\;$  Value From: The low range value that a characteristic can take on
- Value To: The upper range value that a characteristic can take on
- Value Type: A kind of value that the characteristic can take on, such as numeric, text, and so forth
- Resource Specification is an abstract base class for representing a generic means for implementing a particular type of Resource.
  - Brand: The manufacturer or trademark of the specification
  - Description: A narrative that explains in detail what the resource specification is
  - Href: Reference of the resource specification
  - $^{\circ}~$  Id: Unique identifier of the resource specification
  - ° Last Update: Date and time of the last update
  - Lifecycle Status: Used to indicate the current lifecycle status
  - Name: Name of the resource specification
  - ° Valid For: The period for which the resource specification is valid
  - Version: Resource specification version
- Service Candidate: Is an entity that makes a Service Specification available to a catalog.
  - Description: A narrative that explains in detail what the service candidate is
    - Href: Reference of the service candidate
    - ° Id: Unique identifier of the service candidate
    - $^{\circ}\;$  Last Update: Date and time of the last update
    - ° Lifecycle Status: Used to indicate the current lifecycle status
    - nameName of the service candidate
    - ° Valid For: The period for which the service candidate is valid
    - Version: Service candidate version
- Service Spec Characteristic is an abstract base class that represents the key features of this Service Specification.
  - Configurable: If true, the Boolean indicates that the service Spec Characteristic is configurable
  - Description: A narrative that explains in detail what the service Spec Characteristic is
  - ° Href: Reference of the service Spec Characteristic
  - ° Id: Unique identifier of the service Spec Characteristic
  - Name: Name of the service Spec Characteristic
  - Value Type: A kind of value that the characteristic can take on, such as numeric, text and so forth
    - Valid For: The period for which the service Spec Characteristic is valid
- Service Spec Characteristic Value: Is used to define a set of attributes, each of which can be assigned to a corresponding set of attributes in a Service Spec Characteristic object.
  - Default: Indicates if the value is the default value for a characteristic
  - Unit Of MeasureCould be minutes, GB...
  - Valid For: The period of time for which a value is applicable
  - Value: A discrete value that the characteristic can take on
  - Value From: The low range value that a characteristic can take on
  - Value To: The upper range value that a characteristic can take on
  - Value Type: A kind of value that the characteristic can take on, such as numeric, text, and so forth
  - Service Specification is an abstract base class for representing a generic means for implementing a particular type of Service.
    - Brand: The manufacturer or trademark of the specification
    - Description: A narrative that explains in detail what the service specification is
    - Href: Reference of the service specification
    - Id: Unique identifier of the service specification
    - Last Update: Date and time of the last update
    - Lifecycle Status: Used to indicate the current lifecycle status.
    - Name: Name of the service specification
    - Valid For: the period for which the service specification is valid
    - Version: Service specification version
- Service Spec Relationship allows for Service Specifications to contain other Service Specifications.
  - Href: Reference of the service Specification
  - ° Valid For: The period for which the service Spec Relationship is valid
  - $^{\circ}\,$  Type: Type of relationship such as migration, substitution, dependency, exclusivity